

[57] Abstract

The present invention relates to an antenna system and method.

5 The antenna system for measuring azimuth and elevation angles of an active, signal sending radiosonde (31), comprises a first passive antenna group (13) comprising at least two antenna arrays (11a, 11b), the direction pattern of which is wide at least in elevation plane for measuring azimuth angle of the

10 radiosonde (31) based on the phase differences between the antenna arrays (11a, 11b), a second passive antenna group (12) comprising at least two antenna arrays (10a, 10b), the direction pattern of which is wide at least in elevation plane for measuring the elevation angle of the radiosonde (31) based on

15 the phase differences between the antenna arrays (10a, 10b) and the rotational position of the antenna field (1), and at least one third antenna (8) having high gain for receiving the telemetry signal, the direction pattern of which element (8) is narrow in azimuth plane and wide in elevation plane.

20 According to the invention first (13) and second (12) antenna groups form a solid antenna field (1), and antenna field (1) is fixedly tilted in a predetermined elevation position.

25 (Fig. 1a)